



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/577,162

10/05/2006

Harumi Sakamoto

35355/64

3294

23838 7590 10/08/2008

KENYON & KENYON LLP
1500 K STREET N.W.
SUITE 700
WASHINGTON, DC 20005

EXAMINER

ASINOVSKY, OLGA

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

10/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,162	Applicant(s) SAKAMOTO ET AL.	
	Examiner OLGA ASINOVSKY	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/26/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 11/587,386 having Pub. No. US 2008/0009593.

3. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed polyolefin graft copolymer is readable in the claims 1-9 of Application No. 11/587,386. Claims of Application No. 11/587,386 disclose the polyolefin graft copolymer which is produced by copolymerizing an olefinic monomer and a macromonomer in the presence of a coordination polymerization catalyst in a latex (claim 2 of Application No 11/587,386). A macromonomer in the latex form is obtained by radical emulsion polymerization of vinyl monomer using a redox initiator

Art Unit: 1796

(claim 1 of Application No. 11/587,386) which is readable in the present claim 3. The coordination polymerization catalyst (claim 3 of Application No. 11/587,386) is readable in the present claim 4. While claims in Application No. 11/587,386 do not claim a macromonomer having a multilayer structure, the macromonomer latex in the claims of said Application No. 11/587,386 is referring to a multilayer macromonomer produced by graft emulsion polymerization technique on page 2 [0024] in the Pub. No US 2008/0009593, see also paragraphs [0031] to [0036]. Case law holds that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970). Thus, it would have been obvious to one of ordinary skill in the art to utilize a macromonomer as a multilayer macromonomer in claims 1-9 of Application No 11//587,386 having Pub. No 2008/0009593 and, thereby arrive at the presently claimed invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 7,335,703.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of Patent No. 7,335,703 disclose the polyolefin graft copolymer which is produced by graft-copolymerizing an olefin monomer with a

(meth)acryl macromonomer in the presence of a coordination polymerization catalyst (claim 1 of Patent'703). The coordination polymerization catalyst in claims of Patent'703 does not disclose that said "coordination polymerization catalyst is a complex containing a ligand having two imine atoms" for the present claim 4. To analyze the chemical structure and property of the coordination polymerization catalyst, the disclosure of Patent'703 at column 4, lines 10-11 disclose that a catalyst composed of an alpha-diimine ligand and a transition metal such as palladium or nickel, column 3, line 57. Case law holds that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970). Thus, it would have been obvious to one of ordinary skill in the art to utilize the coordination polymerization catalyst composed of an alpha-diimine ligand and a transition metal selected from Groups VIII to X of the periodic table in the claims 1-6 of Patent'703 and, thereby arrive at the presently claimed invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

6. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukui U.S. Patent 7,335,703.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

Art Unit: 1796

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

All discussions in the paragraph 3 above are adequately set here.

In additional, Fkui discloses a polyolefin graft copolymer prepared by graft-copolymerizing an olefin monomer with a (meth)acryl macromonomer or an isobutylene macromonomer in the presence of a coordination polymerization catalyst based on a late transition metal complex, column 2, lines 50-67. The coordination polymerization catalyst based on the late transition metal complex and containing an alpha-diimine ligand, column 3, lines 16-17, 25-56 and column 4, lines 1-12, is readable as claimed coordination polymerization catalyst in the present claims 4, 10-12. The (meth)acryl macromonomers in the form of microparticles include core-shell structure, column 7, lines 47-54. The core-shell copolymer is prepared by graft emulsion copolymerization in the presence of an ammonium persulfate=initiator in water medium, column 7, line 51 and column 10, line 25, for the present claims 3 and 9. The macromonomer having the core-shell structure is readable for being claimed macromonomer having a multilayer structure in the present claims 2-3. The olefin monomer, column 5, lines 22-37, is readable in the present claims 1 and 5. The step of graft polymerization of an olefin monomer by using a coordination polymerization catalyst in the presence of a core-shell copolymer=macromonomer in the form of latex is expected in an aqueous system for the present claim 6, column 10, lines 49-67 and column 11. The resulting graft

Art Unit: 1796

copolymer can be used in thermoplastic elastomers having polyolefin resin components, column 9, lines 5-16, for the present claims 7-8.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References have been considered. The closest reference to EP 1 440 988 belongs to the patent family to US 20040242790 having Patent No. 7,335,703, which is discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLGA ASINOVSKY whose telephone number is (571)272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796

Olga Asinovsky
Examiner
Art Unit 1796